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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/027,199	12/20/2001	Byoung S. Kwon	740.013US3	2369		
23643 DADNIES & TI	7590 09/25/2007 HORNBURG LLP	EXAMINER				
11 SOUTH MI	ERIDIAN	LANDSMAN, ROBERT S				
INDIANAPOL	IS, IN 46204		ART UNIT	PAPER NUMBER		
			1647			
•			MAIL DATE	DELIVERY MODE		
•			09/25/2007	PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)			
	10/027,199	KWON, BYOUNG S.			
Office Action Summary	Examiner	Art Unit			
	Robert Landsman, Ph.D.	1647			
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the	correspondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DATE - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period value of reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATIO 36(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE.	N. mely filed n the mailing date of this communication. ED (35 U.S.C. § 133).			
Status					
 1) ⊠ Responsive to communication(s) filed on 23 Dec 2a) ☐ This action is FINAL. 2b) ☒ This 3) ☐ Since this application is in condition for allower closed in accordance with the practice under E 	action is non-final. nce except for formal matters, pr				
Disposition of Claims					
4) ⊠ Claim(s) 1-3 and 19-23 is/are pending in the appearance of the above claim(s) is/are withdraw 5) ⊠ Claim(s) 2 and 3 is/are allowed. 6) ⊠ Claim(s) 1 and 19-23 is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction and/o	wn from consideration.				
Application Papers					
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) accomplicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Examine 10.	epted or b) objected to by the drawing(s) be held in abeyance. Setion is required if the drawing(s) is ol	ee 37 CFR 1.85(a). bjected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: Certified copies of the priority documents have been received. Certified copies of the priority documents have been received in Application No. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 					
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summar Paper No(s)/Mail D 5) Notice of Informal 6) Other: <u>Sequence C</u>	Date Patent Application			

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DETAILED ACTION

1. Formal Matters

- A. Claims 1-3 and 19-23 are pending and are the subject of this Office Action.
- B. Claims in this application are allowable, but the application was suspended pending a potential interference. The application which is the potential interfering reference has issued. Therefore, a rejection appears below.

2. Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- A. Claims 1, 19-23 are rejected under 35 U.S.C. 102(e) as being anticipated by Goodwin et al. (US Patent 7,211,259). Instant claim 1 recites an extracellular domain of SEQ ID NO:2 capable of binding H4-1BB. Goodwin teaches a polypeptide 100% identical to SEQ ID NO:2 of the instant application (see claim 3 and attached Sequence Comparison A) which comprises at least bases 41-805 of SEQ ID NO:1 (see attached Sequence Comparison B). Instant claim 19 recites a polynucleotide encoding an extracellular portion of SEQ ID NO:2 capable of binding a 4-1BB ligand. Claim 7 of Goodwin meets this limitation. Claim 21 and 22 of the instant invention recite expression vectors, including those operably linked for expression. These limitations are met by Goodwin (see claim 4 and column 10, lines 45-67). The limitation of claim 23 is also met (column 9, lines 54-58). Applicants should also keep in mind that claim 23 reads on SEQ ID NO:2, itself. The claim states that the vector comprises a polynucleotide which encodes a protein and is located C-terminal to the extracellular domain of SEQ ID NO:2. Since the extracellular domain is part of SEQ ID NO:2, the remaining polypeptide (SEQ ID NO:2 without its extracellular domain) would be considered a polypeptide which would be located C-terminal to its own extracellular domain and which, itself, is not SEQ ID NO:2 or its extracellular domain.

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The US 7,211,259 reference is a U.S. patent that claims the rejected invention. An affidavit or declaration is inappropriate under 37 CFR 1.131(a) when the reference is claiming the same patentable invention, see MPEP § 2306. If the reference and this application are not commonly owned, the reference can only be overcome by establishing priority of invention through interference proceedings. See MPEP Chapter 2300 for information on initiating interference proceedings. If the reference and this application are commonly owned, the reference may be disqualified as prior art by an affidavit or declaration under 37 CFR 1.130. See MPEP § 718.

A 37 CFR 1.131 affidavit is ineffective to overcome a United States patent or patent application publication, not only where there is a verbatim correspondence between claims of the application and of the patent, but also where there is no patentable distinction between the respective claims. In re Clark, 457 F.2d 1004, 173 USPQ 359 (CCPA 1972); In re Hidy, 303 F.2d 954, 133 USPQ 650 (CCPA 1962); In re Teague, 254 F.2d 145, 117 USPQ 284 (CCPA 1958); In re Ward, 236 F.2d 428, 111 USPQ 101 (CCPA 1956); In re Wagenhorst, 62 F.2d 831, 16 USPQ 126 (CCPA 1933).

If the application (or patent under reexamination) and the domestic reference contain claims which are identical, or which are not patentably distinct, then the application and patent are claiming the "same patentable invention." As provided in 37 CFR 41.203(a), an interference exists if the subject matter of a claim of one party would, if prior art, have anticipated or rendered obvious the subject matter of a claim of the opposing party and vice versa. An applicant who is claiming an invention which is identical to, or obvious in view of, the invention as claimed in a domestic patent or patent application publication cannot employ an affidavit under 37 CFR 1.131 as a means for avoiding an interference with the reference. To allow an applicant to do so would result in the issuance of two patents to the same invention (MPEP § 715.05).

3. Conclusion

A. Claims 2 and 3 are allowable

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Advisory information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Landsman whose telephone number is (571) 272-0888. The examiner can normally be reached on M-F 10 AM – 7 PM (eastern).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Manjunath Rao at 571-272-0939. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Robert Landsman, Ph.D.

Primary Examiner Art Unit 1647

Fri Sep 14 14:29:14 2007

> 0 < O | O IntelliGenetics > 0 <

Sequence Comparison B

Results file us-10-027-199-2.res made by tport on Wed 12 Sep 107 16:10:12-PDT. Results of the initial comparison of US-10-027-199-2 (1-255) with: File : 7211259.pep Standard Deviation 97.66 Total Elapsed 00:00:00:00 Query sequence being compared:US-10-027-199-2 (1-255) Number of sequences searched: 7 Number of scores above cutoff: 7 Joining penalty Window size 170 SEARCH STATISTICS FastDB - Fast Pairwise Comparison of Sequences Release 5.4 Median 10 K-tuple PARAMETERS CPU 00:00:00 PAM-150 . 16% 5.00 0.05 Mean 62 Similarity matrix PA
Threshold level of sim.
Mismatch penalty
Gap penalty
Gap size penalty
Cutoff score
Randomization group 78-SCORE 0 STDEV Scores: 100-Times:

20 255

1335 Number of residues: Number of sequences searched: Number of scores above cutoff:

A 100% identical sequence to the query sequence was found: The scores below are sorted by initial score. Significance is calculated based on initial score.

Description Sequence Name

Init. Opt. Length Score Score Sig. Frame

1. US-08-910-449A-8 Sequence 8, Application U 255 255 255 1.98 0
The list of other best scores is:
equence Name Descriptio
2. US-08-910-449A-6 Sequence 6, Application U 256 139 190 0.79 0 3. US-08-910-449A-1 Sequence 15, Application 245 16 98 -0.47 0 4. US-08-910-449A-4 Sequence 4, Application U 254 13 110 -0.50 0 5. US-08-910-449A-2 Sequence 2, Application U 309 9 108 -0.54 0 6. US-08-910-449A-1 Sequence 17, Application 5 4 4 -0.59 0
1. US-10-027-199-2 (1-255) US-08-910-449A-8 Sequence 8, Application US/08910449A
Initial Score = 255 Optimized Score = 255 Significance = 1.98 Residue Identity = 100% Matches = 255 Mismatches = 0 Gaps = 0 Conservative Substitutions = 0
X 10 20 30 40 50 60 70 MGNSCYNIVATLILVIANERTRSLODDCSNCPAGTFCDNARNQICSPCPPNSFSSAGGQRTCDICRQCKGVP
80 90 110 1140 RTRKECSSTSNAECDCTPGFHCLGAGCSWCEODCKGGGETKKKGCKOCCFGTFNDQKRGICRPWTNCSLDGK
150 160 170 180 200 210 SVLVNGTKERDVVCGPSPADLSPGASSVTPPAPARRFGHSPQIISFFIALTSTALLFLIFFITLRFSVVKRG
220 X RKKLLYIFKQPPMRPVQTTQBEDGCSCRFPEEGGCEL

> 0 < 0 | O IntelliGenetics > 0 <

FastDB - Fast Pairwise Comparison of Sequences Release 5.4

Results file us-10-027-199-1.res made by tport on Wed 12 Sep 107 16:14:44-PDT.

Query sequence being compared:US-10-027-199-1 (1-838) Number of sequences searched: 10 Number of scores above cutoff: 10

Results of the initial comparison of US-10-027-199-1 (1-838) with: File : 7211259.seq

372 279 186 -8 SCORE 0 100-

PARAMETERS

K-tuple Joining penalty Window size Unitary 1 5.00 0.33 Similarity matrix
Mismatch penalty
Gap penalty
Gap size penalty
Cutoff score
Randomization group

30 500

SEARCH STATISTICS

Scores:

Standard Deviation 264.16 Total Elapsed 00:00:00.00 Median 24 5973 10 10 CPU 00:00:00 Mean 139 Number of residues: Number of sequences searched: Number of scores above cutoff: Times:

1. US-10-027-199-1 (1-838) US-08-910-449A-7 Sequence 7, Application US/08910449A

837 Optimized Score = 837 Significance = 2.64 99% Matches = 837 Mismatches = 1 0 Conservative Substitutions = 0 Initial Score = Residue Identity = Gaps

830

820

X 10 20 AATCAGCTITGCTAGIATCAIA CTCAAGAGTGACATITGTGAGCTAATTTGATTAAAATTCTCTTGGAATCAGCTTTGCTAGIATCAIA 30 40 50 60 70 80	30 40 50 60 70 80 90 CCTGTGCCAGATTTCATCATGGGAAACAGCTGTTACAACATAGTAGCCACTCTGTTGCTGGTCCTCAACTTT	100 110 120 130 140 150 160 GAGGACAAGAACTGCCCAGCTACATTCTGTGATAATAACAGGAAT [170 180 230 230 230 CAGATTGCAGAGAGAGAAAAAGGACAGAGGAGAGAACAGGACAGGAGAGAACAGGACAGGATTGCAGGATTTGCAGGACAAAAAAATAGTTTCTCCAGCGCAGGTGGACAAAAGGACATTGCAGGAGACAAAAAAAA	240 250 300 310 310 CAGTOTTAAAGGTTTTTCAGGAAGGAGTGTTCCTCCACCAGCAATGCAGAGTGTGACTGCACTCCA	320 330 340 350 360 370 380 380 360 370 380 380 380 370 380 380 360 370 380 380 380 380 380 380 380 380 380 38	390 440 450 AAAGGITGTAAAGGACTITGGGACATITAACGAICAGAAACGIGGCAICTGICGACCCTGGACAAAC [460 470 480 500 500 510 520 TGTTCTTTGGATGGAAGTCTGTGCTTGTGAATGGGACGAGGAGGAGGACGTGGTCTGTGACCATCTCCA	530 540 550 560 570 580 570 600	600 610 620 630 640 650 650 ATCATCTTCTTCTTGCGCTGACTGCGTTGCTTTCTTCTTCCTCACGCTTCGTTTC [680 690 700 710 720 720 740 TCTGTTGTTAAACGGGGCAGAAACTCCTGTATATATTCAAACATTTTATGAAACCAGTACAAACT	750 760 780 780 800 810 ACTCAAGAGGAAGATGGCTGCCGATTTCCAGAAGAAGAAGAAGGAGATGTGAAATGGAATGAAT	
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